

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims **1-33**, (canceled)

34. (New) A semiconductor wafer processing system having a vacuum environment therein and comprising:

- a semiconductor wafer processing module that includes vacuum chamber having a wafer holder therein configured to hold a semiconductor wafer for processing in the vacuum environment;

- at least one maintenance item in the processing module in the vacuum environment, the at least one maintenance item including a ring, a shield, an insulator, an adapter, a baffle, a plate or another internal chamber component of a type that may be removed for cleaning or maintenance, or to be replaced;

- the processing module also having mounting structure therein configured to removably mount a maintenance item in the vacuum environment in the chamber of the processing module;

- the maintenance item being removably mounted on the mounting structure;

- a transfer system having a wafer transfer mechanism operable to transfer a semiconductor wafer within the vacuum environment between the transfer system and the processing module;

- a controller coupled to the processing module and the transfer system and programmed to control the wafer transfer mechanism to transfer semiconductor wafers to and from the wafer holder in the vacuum chamber of the processing module and through the transfer system;

- the controller also being programmed to control the wafer transfer mechanism to transfer the maintenance item to and from the mounting structure in the vacuum chamber of the processing module and to and from the transfer system without exposing the processing module to an outside environment.